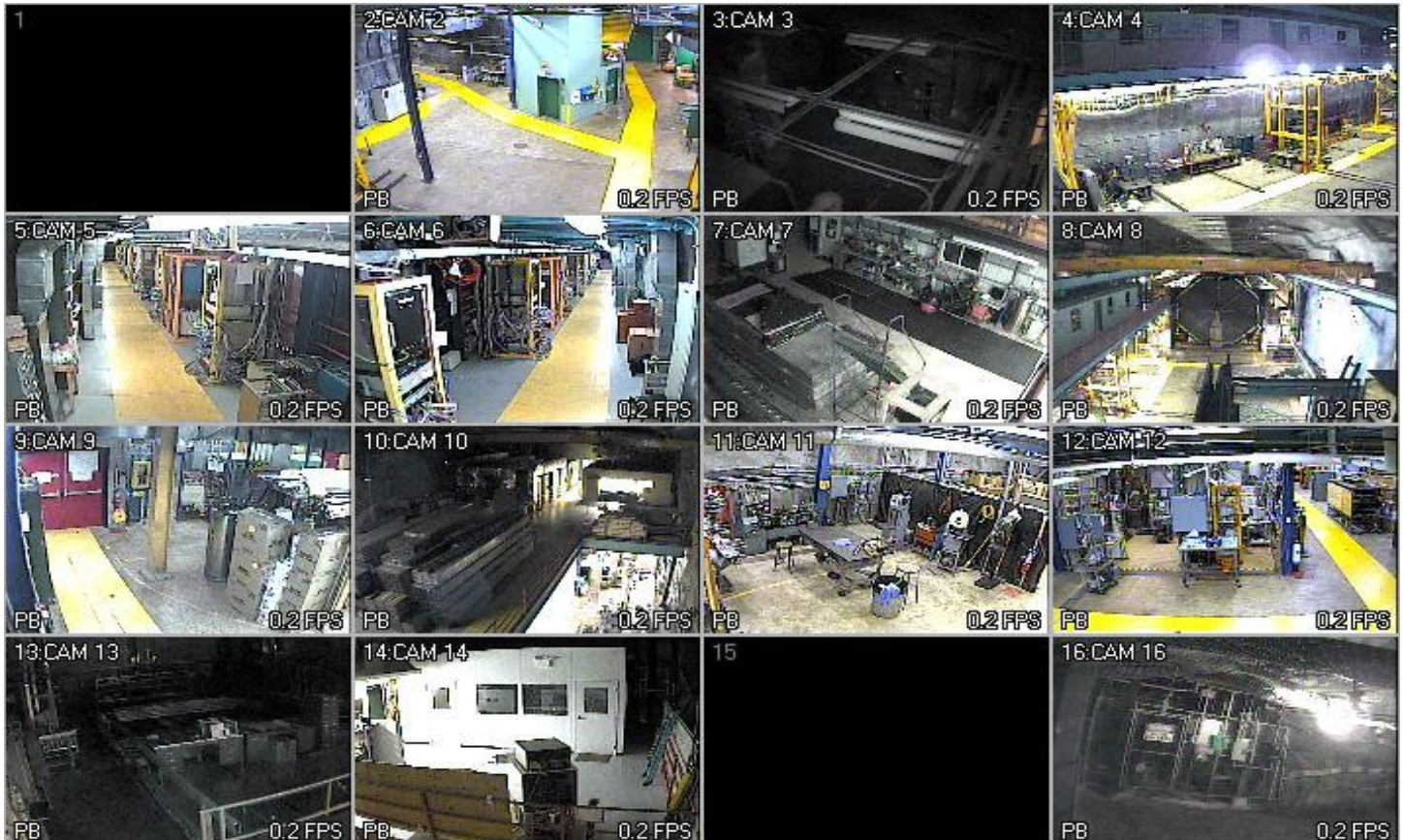
# NuMI-MINOS Status Report – A. Habig

- Shutdown Work Progress:

Detectors and Beam Systems

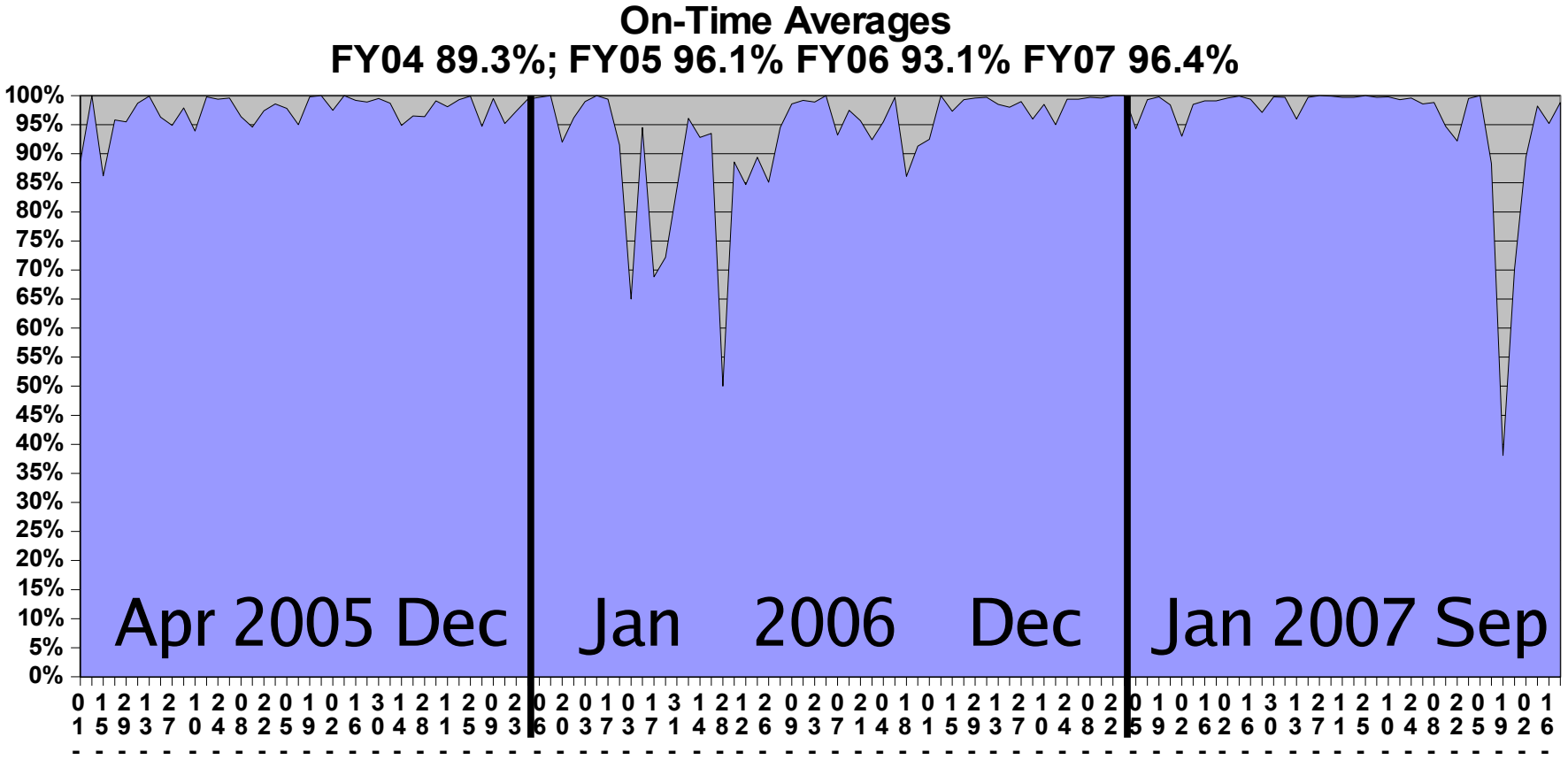
# NuMI-MINOS Status Report – A. Habig

- FAR DETECTOR: Rik Gran
- Extensive safety reviews over the summer result in improved procedures and documentations
- Also new equipment – radios, rebreathers, cameras for rescue/emergency assessments



# NuMI-MINOS Status Report – A. Habig

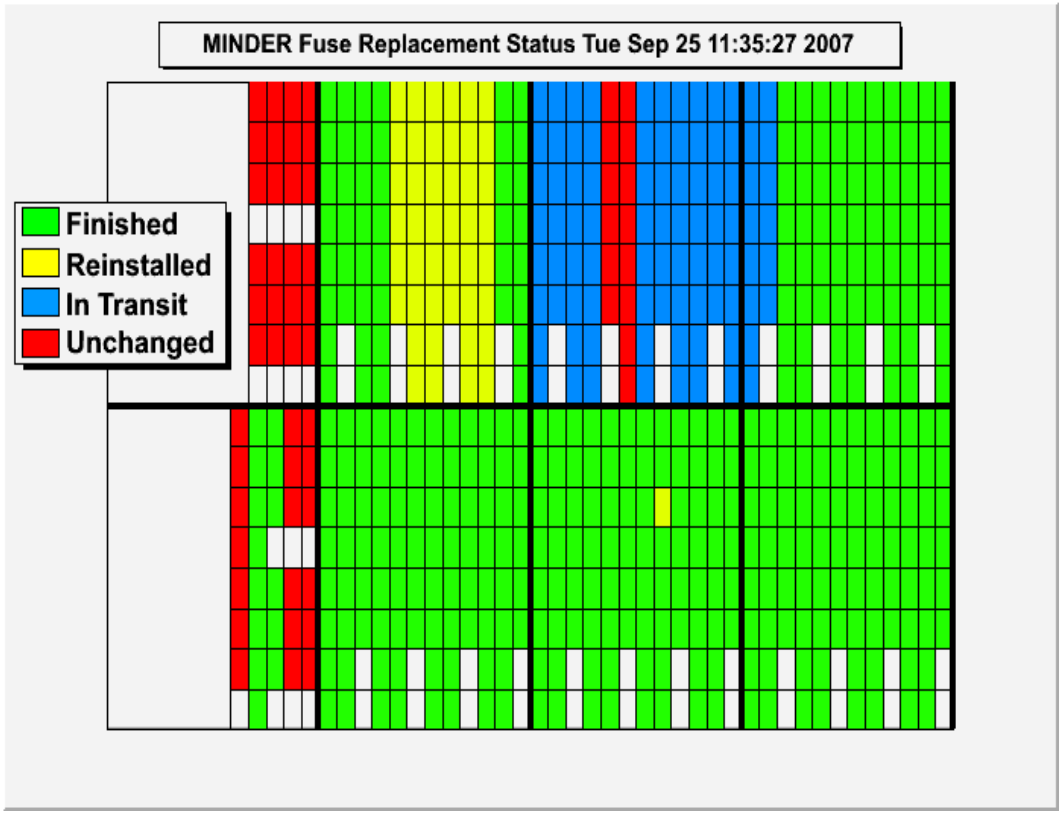
- FAR DETECTOR: Rik Gran
- Overall live time (for atmospherics and cosmics) results in new record for FY07 (even integrated over shutdown work):



# NuMI-MINOS Status Report – A. Habig

- NEAR DETECTOR : Alec Habig

- Front-end electronics refit roaring along
  - Troublesome fuses on Minder cards under-going mass replacement with reset-able polyfuses
  - Three crates at a time pulled, sent to Argonne
  - ~70% complete
  - Reliability upgrade
  - On Schedule



# NuMI-MINOS Status Report – A. Habig

- NEAR DETECTOR : Alec Habig

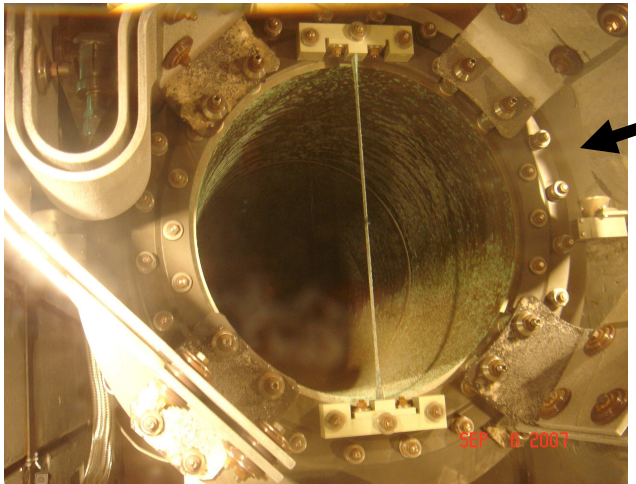
- Ceiling Sealing over Minerva area in front of MINOS Near Detector has started
  - Several week task
  - Parts of detector, racks, computers have been covered to deflect dust, but still running
  - Cannot enter work area while contractors are in lifts
    - Use escape passage leading to rear of detector for access

MINOS vs Shelob

# NuMI-MINOS Status Report – A. Habig

- BEAM SYSTEM EFFORTS: (Jim Hylen)

- Target Pile Dehumidification Installation Project:
  - Completion of contractor efforts in target hall projected ~ Oct 18
- Horn 2 leak identified and repair preparations in progress
  - Air leak at the ceramic insulator on the suction line (same problem as fixed during Spring 2006 shutdown). Will be repaired using new design ceramic isolator assembly [*as presented in July 16 AEM*], scheduled for Oct. 7
  - Will also electrically float the horn 2 module to avoid ground faults



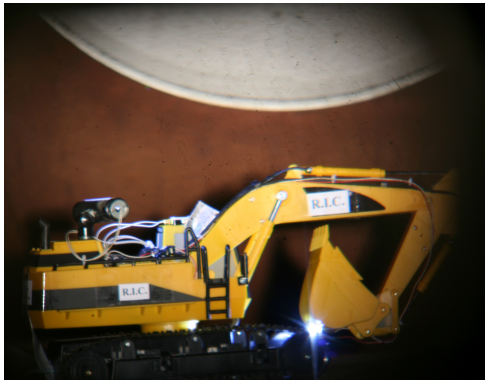

Horn 2 now

Still running with original horns; in midst of 3rd repair of a water line ceramic transition.

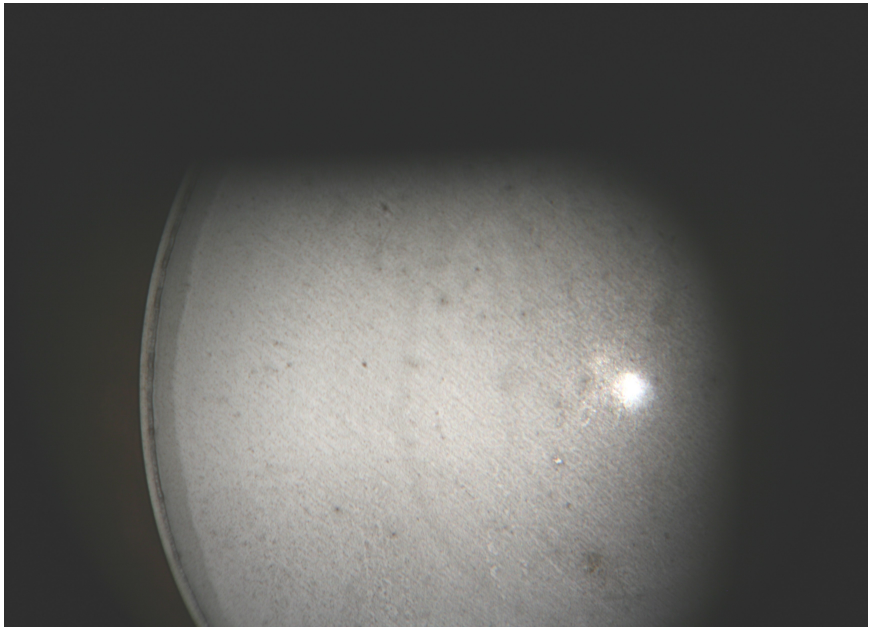
# NuMI-MINOS Status Report – A. Habig

- BEAM SYSTEM EFFORTS: (Jim Hylen, cont)

- Addressed high leakage current with HV101 magnet string
  - Replaced 1st dipole (of 6, rest OK).
- Planning towards filling decay pipe with helium in place of vacuum continues
  - Risk mitigation for the decay pipe window; an increasing concern due to the severe environment of target hall chase. Images of window show a spot at beam center.



The Remote Illumination Caterpillar



# NuMI-MINOS Status Report – A. Habig

- BEAM SYSTEM EFFORTS: (Jim Hylen, cont)

- ~ 1 atm He in the 677m pipe changes a possible window failure from catastrophic implosion to pinhole leaks, at a cost of 0.17 interaction lengths of new material in the beam
  - Slightly decreases $\nu_\mu$ flux (~2%) and increases backgrounds (Laura Loiacono, MINOS-doc-3557)
  - He feeder lines being installed now, but there is a long list of technical and bureaucratic items to work on

- Shooting for getting NuMI beam back ~25 October, with He in the decay pipe